

WHAT IS CLAIMED IS:

1. A transmission system comprising: a transmission apparatus for transmitting audio data of multi channels and auxiliary data required for playback of the audio data; and a receiving apparatus for receiving the audio data and the auxiliary data which are transmitted by the transmission apparatus, wherein

the auxiliary data include channel assignment information of the audio data.

2. The transmission system of Claim 1 wherein

the auxiliary data further includes sampling frequency information.

3. The transmission system of Claim 1 wherein

the auxiliary data further includes quantization bit information.

4. The transmission system of Claim 1 wherein

the channel assignment information of the audio data is based on DVD-Audio standards.

5. The transmission system of Claim 1 wherein

the transmission apparatus comprises a multiplexer for multiplexing the audio data and the auxiliary data, to create multiplexed data, and

the receiving apparatus comprises a demultiplexer for receiving the multiplexed data transmitted from the transmission apparatus, and demultiplexing the data into audio data and auxiliary data.

6. The transmission system of Claim 1 wherein when transmitting audio data having various sampling frequencies to the receiving apparatus, the transmission apparatus multiplexes and transmits first-generated audio data first.

7. The transmission system of Claim 1 wherein according to a method for transmitting the audio data and the auxiliary data, the data are time divided into transmission frames, and

as for transmission of the audio data, prescribed bits are assigned to each transmission frame.

8. The transmission system of Claim 1 wherein a method for transmitting the audio data and the auxiliary data complies with a MOST method.

9. A transmission system comprising a transmission apparatus for transmitting digital data and auxiliary data required for playback of the digital data; and a receiving apparatus for

receiving the digital data and the auxiliary data which are transmitted from the transmission apparatus, wherein  
the transmission apparatus comprises:

a multiplexer for multiplexing the digital data and the auxiliary data, to create block data which is composed of n frames as a multiple of a predetermined encryption unit; and

an encryptor for encrypting the block data in the predetermined encryption unit, to create encrypted data, and

the receiving apparatus comprises:

a decoder for decoding the encrypted data transmitted from the transmission apparatus; and

a demultiplexer for demultiplexing the block data decoded by the decoder into digital data and auxiliary data.

10. The transmission system of Claim 9 wherein  
the predetermined encryption unit is 8 bytes.

11. The transmission system of Claim 9 wherein  
the multiplexer multiplexes copyright protect information as information for protecting copyright concerning the digital data, in plural frames within the block data.

12. The transmission system of Claim 11 wherein  
the copyright protection information includes at least copy permission information indicating whether copying of the digital

data is permitted or not, in a first one of the frames in which the information is multiplexed.

13. The transmission system of Claim 11 wherein the copyright protect information includes copy permission information indicating whether copying of the digital data is permitted or not, copy times information indicating how many times of copying is permitted when the copying is permitted, copy quality information indicating the quality of copying when the copying is permitted, and audio transaction information indicating whether special audio access control is performed or not.

14. The transmission system of Claim 9 wherein according to a method for transmitting the digital data and the auxiliary data, the data are time divided into transmission frames, and

as for transmission of the digital data and the auxiliary data, prescribed bits are assigned to each transmission frame.

15. The transmission system of Claim 9 wherein a method for transmitting the digital data and the auxiliary data complies with a MOST method.

16. A transmission apparatus which receives audio data and copyright protect information that is information for protecting

copyright of the audio data, and generates a periodic signal with eight transmission frames as one cycle, comprising:

a first multiplexer means for multiplexing the copyright protect information in synchronization with the periodic signal;

an encryptor means for performing encryption in synchronization with the periodic signal; and

a second multiplexer means for multiplexing periodic information indicating information of the periodic signal in synchronization with the periodic signal.

17. The transmission apparatus of Claim 16 wherein

a method for transmitting the data complies with a MOST method.

18. A receiving apparatus which receives audio data and copyright protect information, from a transmission apparatus which receives the audio data and the copyright protect information that is information for protecting copyright of the audio data and generates a periodic signal with eight transmission frames as one cycle, comprising:

a first demultiplexer means for generating a periodic signal on the basis of periodic information as information of the periodic signal detected from the received data;

a decoder means for performing decoding in synchronization with the periodic signal; and

a second demultiplexer means for demultiplexing the copyright protect information in synchronization with the periodic signal.

19. The receiving apparatus of Claim 18 wherein  
a method for transmitting the data complies with a MOST  
method.

2004-07-09 22:27:00